



## THE CITY OF SAN DIEGO

### **Report to the Downtown Parking Management Group**

DATE ISSUED: October 4, 2006

ATTENTION: Downtown Parking Management Group  
Agenda of October 5, 2006

SUBJECT: Interim Report on Downtown Multi-space Parking Pay Station Pilot Project

#### SUMMARY

THIS IS AN INFORMATIONAL ITEM ONLY. NO ACTION IS REQUIRED ON THE PART OF THE COMMITTEE.

#### BACKGROUND

On June 5, 2006, 50 Cale Multi-space Pay Stations were put into service at various Downtown locations. These Cale meters replaced 309 POM single-head parking meters previously installed at these locations. This completed the implementation of the Downtown Multispace Parking Pay Station Pilot Project, formerly known as the Downtown Multispace Parking Meter Pilot Project.

This 9-month pilot project was undertaken by the City in partnership with the Downtown Community Parking District to evaluate multi-space parking meter technology and its potential for broader application within the City. The use of this technology has the potential to increase occupancy and turnover of parking spaces, provide more complete and timely information and statistics, increase parking meter revenue, and provide greater flexibility and control of parking meter rates. The technology also provides a broader range of payment options including credit cards and is likely to become one of many important components necessary to maximize overall parking utilization.

City staff, with input from key stakeholders, identified various criteria to be used to evaluate the success of this pilot project, (Attachment 1). Prior to the implementation, baseline data was gathered with respect to the evaluation criteria for later comparison with data gathered during the pilot project period.

## DISCUSSION

The purpose of this 3-month interim report is to provide relevant project-to-date data along with the status of certain project related issues. A 6-month interim report will be provided once that milestone is reached followed by a final full report which will be issued subsequent to the end of the project.

## ***COST***

Parking Meter Operations is tracking and comparing the cost for installation, maintenance and collection of the new technology against the conventional single-head meters.

Service	Cost		
	Single-Head	Multi-space	Difference (\$) <sup>1</sup>
New meter/pay station	\$487	\$7,812	\$4,793
Installation	\$257	\$171	-\$1,422
Removal	\$213	TBD	TBD
New meter/pay station with installation	\$744	\$7,983	\$3,370
Monthly cost of meter maintenance (per meter) <sup>2</sup>	\$4.70	TBD	TBD

## ***ENFORCEMENT***

Parking Enforcement and Parking Administration are tracking injury reports, citation issuance and revenue, and enforcement officer time.

Injury reports and comments from enforcement staff indicated the following:

- Trying to read receipts in taller vehicles is straining their necks.
- One PEO strained her calves while jumping up to read the receipt displayed in a truck.

Parking Enforcement staff estimate that it is taking at least four times longer to check for violators in the "pay and display" multi-space metered areas. This does not include time to issue parking citations for violators. We are working with staff to more accurately determine the actual increase in time necessary to enforce meter violations with the new technology.

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<sup>1</sup> Using the pilot project ratio of one (6.20) single-head meters for each multi-space pay stations.

<sup>2</sup> Field services only. Includes repairing jams and changing batteries.

<b>Parking Citations</b>	<b>Single-Head 6/5/05 – 9/5/05</b>	<b>Multi-space 6/5/06 – 9/5/06</b>	<b>Difference (%)</b>
Number issued	1,318	1,045	-20.7%
Revenue generated to-date <sup>3</sup>	\$38,864	\$16,950 <sup>(2)</sup>	-56.4%

## **OPERATIONS**

Parking Meter Operations and Traffic Engineering are collecting information to compare items such as parking space usage and turnover, parking meter revenue, and meter reliability and collection time.

<b>Parking Meter/Pay Station</b>	<b>Single-head 6/5/05 – 9/5/05</b>	<b>Multi-space 6/5/06 – 9/5/06</b>	<b>Difference (%)</b>
Collection time per meter	15.5 hours/wk (1 min./meter)	4.2 hours/wk (10 min./meter) <sup>4</sup>	-72.9%
No. of malfunctions	62	90 <sup>5</sup>	45.2%
Meter revenue	\$74,983 <sup>6</sup>	\$103,359	37.8%

### **Usage per meter/space**

A parking duration study was conducted by Traffic Engineering to determine occupancy, duration, and turnover prior to the installation of the multi-space parking meters in the pilot project area (Attachment 2). Another parking duration study will be conducted by Traffic

<sup>3</sup> When comparing revenues from year-to-year, you must consider that revenues generated from last year's citations have had more time to be collected and revenue received is expected to be greater than corresponding periods in the current year. Maximum revenue collection rates are not experienced until 18-24 months after the citation is issued.

<sup>4</sup> Two staff members are needed to perform collection duties (5 minutes per staff member). One staff member is required to monitor the revenues collected and left in the vehicle as well as ensure the safety of the second staff member performing the actual revenue collection. The collection time noted does not include travel time or depositing of revenues.

<sup>5</sup> Increase in malfunctions is attributed to several factors including printer jams, communication problems, and problems with the anti-pin module, a door mechanism that needed replacement on several Multispace pay stations. The later two issues have been resolved.

<sup>6</sup> From June 5, 2005, through September 5, 2005, the number of parking meters fluctuated in the area where the 309 parking meters were removed for the pilot project. Therefore, it is difficult to do a complete and accurate revenue comparison since some of the meters were not installed during the entire analysis period.

Engineering toward the end pilot project period. The two studies will allow for a comparison of these factors before and after the installation of the multi-space parking pay stations.

### **Parking Turnover/Space**

To determine the increase of parking supply which resulted from the removal of parking space markings (parking T's), Traffic Engineering will select several blocks and calculate the number of spaces before the parking T's were removed and the number of parking spaces after the T's were removed. Traffic Engineering will then calculate the percentage of parking supply increase for the pilot area.

### ***PUBLIC ACCEPTANCE***

With the assistance of key stakeholders like the DPMG and CCDC, staff is collecting information to evaluate overall public acceptance of the new technology. Information such as the number of meter service requests and complaints, citation appeals, and anecdotal information from businesses and users of downtown parking will be compared. If there are funds available, a customer survey will also be conducted.

### **Number of Complaints/Positive Comments**

Traffic Engineering and Parking Administration are tracking input they receive from parking users. To date, we have received one (1) complaint and one (1) contact which included both positive and negative comments. The following comments pertaining to the new technology were communicated:

- Lack of available parking for residents because of high occupancy levels (*700 block of Kettner Blvd*).
- New meters do not refund unused time on pre-paid parking meter cards.
- Multi-space meters are an aesthetic improvement and presumably a cost effective option.

Parking Enforcement staff has also received some comments from citizens regarding the multi-space pay stations:

- Cannot locate where to pay
- Signs are inadequate or not visible
- When single-head meter not seen, assume parking is free
- Pay station does not give the maximum time allowed when using a credit card.
- New technology is confusing, especially for foreign visitors and tourists
- Pay stations do not always accept the methods of payment (credit cards, debit cards or coins)

### **Parking Citation Appeals**

To date, the Parking Administration, Appeals section has processed a total of 14 appeal requests for citations associated with the multi-space pay stations (Attachment 3). However, there is currently a backlog of appeals to be reviewed which could include appeals relevant to this project. Therefore the following data may not include all appeals submitted and or received prior to September 5, 2006.

<b>Parking Citation Appeals</b>	<b>No. Requested</b>	<b>No. Upheld</b>	<b>No. Dismissed</b>
Appeals	14	13	1
Administrative. Hearings	4	0	0
Court Hearings	0	0	0

### **Customer Survey**

A survey has not yet been developed by Traffic Engineering. However, Traffic Engineering will be working with Meter Operations and Parking Enforcement to develop a survey in the next few weeks.

### **Public Acceptance/Public Outreach**

The public information staff member initially assigned to this project left employment with the City in July. Since that time, there has not been additional City public information staff available to fill that gap. Fortunately, this has not materially impacted the progress and overall acceptance of the new technology. Initial outreach efforts included the following:

- Key stakeholders assisted with the dissemination of project information and user instructions to the public
- Implementation press release and press conference held by the Mayor
- Posting of project information and user instructions on the City's website
- Initial enforcement grace period
- Meter Operations and Parking Enforcement field staff assistance to users

### **OTHER ISSUES**

Other key issues impacting or resulting from this project which have been identified and either resolved or remain outstanding include the following:

Americans with Disabilities Act (ADA) Compliance – after the implementation of the project, it was determined that the multi-space pay stations may not be in compliance with City, State, and or Federal ADA requirements. City staff worked with Cale and Cale agreed to lower the meters

1.5 inches at Cale's expense to resolve that issue. In addition, agreement was reached as to the appropriate ADA standard to be used for any subsequent installations of the multi-space technology. Cale and City staff completed that work on October 1, 2006 and this issue is now resolved.

Enforcement related items that remain unresolved:

- Citizens displaying valid receipts at a location other than where the meter slip was purchased.
- Tall vehicles are not enforced because the dashboards are too high to be checked.
- Some Municipal Code discrepancies will need to be resolved.
- Requirements for staff markings; Where parking "T"s have been removed, a vehicle that takes up the equivalent of several stalls is permitted to pay for only one space.
- Short time zone installed for businesses. If a vehicle displays a receipt with a time of expiration in excess of the short time zone, can it be enforced?
- Fraudulent receipts.
- Motorcycles, convertibles and vehicles with open windows are subject to citations if the displayed receipts are stolen or blown away by the wind.

Credit card reconciliation – Staff has had some difficulty reconciling credit card deposits to multi-space pay station source transactions. Cale has been working diligently with staff to resolve the issue. In addition, City staff recently met with staff from the City of Portland, Oregon who currently have 200 Cale meters installed. Portland is currently using real-time authorization for their credit card transactions and is not experiencing the same reconciliation issues. Real-time authorization may carry additional benefits and should be considered for any broader implementation of this technology.

Respectfully Submitted,



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Michael Vogt  
Revenue Collections Manager

Attachments

## EVALUATION FOR MULTI-SPACE METERS

### May 17, 2006

This is the data we will be collecting as the baseline before we go-live with the new Multi-space meters on June 5<sup>th</sup>. We will be collecting the same data after the new meters are installed as evaluation criteria for success. There are four different time frames methods. They should be collected using the same method after go-live for comparison. These are:

- a) One time cost/revenue
- b) 9month period/ Biweekly data per block face
- c) One time 9 month period per beat (before and after pilot)
- d) 9 month period/Biweekly data per block (both sides - not face)

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**COST:** (Parking Management will collect baseline): Installation and maintenance, and collection. We will compare the cost of installing and maintaining, and collecting the new devices versus the cost of installing and maintaining conventional single head parking meters.

<u>Factors</u>	<u>Method</u>
Cost per single space meter	One time cost present meter and Multi after <b>(JOSE)</b>
Cost of installation	One time cost present meter and Multi after <b>(JOSE)</b>
Monthly Cost of meter maintenance	9month period/ Biweekly data per block face <b>(JOSE)</b>

**ENFORCEMENT:** (Parking Management will collect baseline): Issues related to the time that it takes to enforce the new devices versus the time that it takes to enforce conventional single head parking meters.

<u>Factors</u>	<u>Method</u>
Injury reports	One time 9 month period per beat (before and after pilot) <b>(ALINA)</b>
Number of citations issued and revenue	9 month period/Biweekly data per block (both sides-not ace) <b>(DAN DICKEL)</b>
Time per block to enforce meters	Two week special collection/per beat, before and after pilot <b>(ALINA)</b>

**OPERATIONS:** (Parking Management and Traffic Engineering will collect): We will evaluate the parking occupancy increase or decrease when compared to what we have now. Revenues from the different type of payment method separated (coins, bills, cards, credit cards, etc.) We will also evaluate the increase in parking supply.

<u>Factors</u>	<u>Method</u>
Collection time per meter	9 month period/Biweekly data per block face <b>(JOSE)</b>
Number of malfunctions	9 month period/Biweekly data per block face <b>(JOSE)</b>
Pilot area meter revenue	One time 9month period revenue before and after pilot <b>(JOSE)</b>
Usage per meter/space	Part of Duration study <b>(TRAFFIC ENG.)</b>
Parking Turn Over/space (parking supply)	Part of Duration study <b>(TRAFFIC ENG.)</b>

**PUBLIC ACCEPTANCE:** We could track the number of meter service requests/complaints. This is the area where we need CCDC and the DPMG to assist us. We will need anecdotal information from businesses and users of on street parking downtown, and if there are funds available, potentially a survey during a public education campaign.

<u>Factors</u>	<u>Method</u>
Number of Complaints	Collected by Traffic Eng from different sources <b>(TRAFFIC ENG.)</b>
Review factors to be included in a survey	Collected by Traffic Eng from different sources <b>(TRAFFIC ENG.)</b>
Number of Positive Comments	Collected by Traffic Eng from different sources <b>(TRAFFIC ENG.)</b>
Public Acceptance	PIO will send Outreach documentation <b>(PIO)</b>

# PARKING DURATION STUDY CONDUCTED BY TRAFFIC ENGINEERING

Based on 60-minute check intervals

6/1/2006

Location			(Hrs)	(Veh/space)
<u>Street</u>	<u>Block</u>	<u>Occupancy</u>	<u>Duration</u>	<u>Turnover</u>
<b>East Village</b>				
F St.	s/s 15th to 16th	0.02	1.00	0.17
F St.	s/s 14th to 15th	0.18	2.44	0.75
F St.	s/s 13th to 14th	0.89	5.64	1.57
F St.	s/s Park to 13th	0.37	1.86	2.00
F St.	s/s 11th to Park	0.12	1.00	1.20
F St.	s/s 10th to 11th	0.17	1.25	1.33
F St.	s/s 9th to 10th	0.62	2.67	2.33
13th St.	w/s F to G	0.48	1.84	2.59
F St.	n/s 14th to 15th	0.01	1.00	0.05
F St.	n/s 13th to 14th	0.50	2.12	2.13
F St.	n/s Park to 13th	0.11	1.00	1.00
F St.	n/s 11th to Park	0.42	3.80	1.00
F St.	n/s 10th to 11th	0.22	3.20	0.63
F St.	n/s 9th to 10th	0.75	1.69	4.00
		0.35	2.18	Avg
<b>Ball Park</b>				
J St	n/s 10th to 11th	0.78	4.13	1.88
08th Ave	e/s J to Island	0.58	1.32	4.40
J St	s/s 06th to 07th	0.89	2.11	4.22
J St	n/s 06th to 07th	1.00	2.86	3.50
		0.81	2.61	Avg
<b>Marina 2</b>				
02nd Ave	w/s Island to Market	0.57	2.03	2.82
02nd Ave	e/s Island to Market	0.43	1.38	3.08
02nd Ave	e/s island to J	0.51	2.31	2.21
02nd Ave	w/s Island to J	0.92	3.44	2.67
		0.61	2.29	Avg
<b>Core/Columbia</b>				
F St	n/s 01st to Front	1.00	2.37	4.22
F St	n/s Front to Union	1.00	1.71	5.83
F St	n/s Union to State	1.00	2.94	3.40
State St	e/s F to E	0.92	2.52	3.67
Union St	w/s F to G	0.80	2.00	4.00
Union St	w/s G to Market	0.89	5.07	1.75
Union St	e/s G to Market	0.43	1.43	3.00
Market St	n/s Union to State	1.00	4.00	2.50
State St	e/s Market to G	0.92	4.58	2.00
State St	e/s F to G	0.65	2.05	3.17
Market St	n/s Front to Union	0.79	2.17	3.63
Front St	w/s G to Market	0.80	2.21	3.63
G St	s/s State to Union	0.96	4.10	2.33
G St	s/s Union to Front	0.76	1.81	4.20
G St	n/s Front to 01st	0.84	1.83	4.60
G St	n/s Front to Union	0.82	2.23	3.67
G St	n/s Union to State	0.50	1.60	3.13
		0.83	2.62	Avg
<b>Marina 1</b>				
Kettner St	e/s G to F	0.91	6.41	1.42
Kettner St	w/s G to F	0.89	5.17	1.71
Pacific Hwy	e/s G to F	0.69	3.44	2.00
F St	n/s Kettner to Pacific Hwy	0.39	2.60	1.50
		0.72	4.41	Avg



**City of San Diego**  
**Multi-Space Meter Parking Citation Appeals**

<b>Citation Number</b>	<b>Date Issued</b>	<b>Location</b>	<b>Violation</b>	<b>Reason For Appeal</b>	<b>Decision</b>	<b>Status</b>
810047001	07/31/06	1300 F St	86.14 – Expired Meter	Ticket was displayed	Cite Upheld-Ticket Not Displayed	Requested 2 <sup>nd</sup> level appeal.
860559827	06/28/06	600 J St	86.14 – Expired Meter	Bought time on meter-Receipt provided	Cite Upheld-Ticket Not Displayed	Paid
851045624	06/24/06	300 West F St	86.14 – Expired Meter	Paid Meter fee at Multi-Space Meter instead of feeding coin meter	Cite Upheld-Purchased ticket/parked at old coin meter	Paid
850045346	06/10/06	600 Front St	86.14 – Expired Meter	Paid and Displayed meter stub, then moved one street over to park vehicle	Cite Upheld-Purchased Ticket/parked veh on other street	Requested 2 <sup>nd</sup> level appeal.
824057674	06/26/06	500 Second Ave	86.14 – Expired Meter	Receipt was displayed-Receipt provided	Cite Upheld-Ticket Not Displayed	Paid
100188866	06/08/06	800 State St	86.14 – Expired Meter	No meters on street.	Cite Upheld-	Paid
100188953	06/07/06	200 West F St	86.14 – Expired Meter	Did not know to display meter stub in window	Cite Upheld-Didn't know to place ticket in Window	Requested 2 <sup>nd</sup> level appeal.
860559828	06/28/06	600 J St	86.14 – Expired Meter	States meter paid-Receipt provided-Receipt face down on dash	Cite Upheld-Ticket not Displayed Face Up	Paid
841066552	07/11/06	1080 F St	86.14 – Expired Meter	Receipt from previous day on one side of dash board, current meter receipt on other side of dash board. Officer didn't see it.	Cite Upheld	Payment overdue. No response received.
822519242	06/23/06	700 State St	86.15 – Overtime Meter	States meter paid-Receipt provided	Cite Upheld	Paid
822519636	07/07/06	700 State St	86.14 – Expired Meter	Parking Card Used-\$2.50 debited from card. No receipt printed	Cite Upheld-Multi Space Meter working properly	Paid
822519759	07/12/06	100 W F St	86.14 – Expired Meter	Didn't display stub on dash	Cite Upheld	Paid
100190135	07/20/06	800 Kettner Blvd	86.14 – Expired Meter	Officer didn't see stub on dash	Cite Upheld	Requested 2 <sup>nd</sup> level appeal.
841065631	06/15/06	800 Union St	86.14 – Expired Meter	Paid Meter fee at Multi-Space Meter and marked at a different block	Dismissed	Dismissed